LineUp With Math™ Alignment
Mathematics Grade Expectations

Standard 7.6: Arithmetic, Number, and Operation Concepts

Grade Expectations	***LineUp With Math™* Activities**
M5: 7 Estimates and evaluates the reasonableness of solutions appropriate to grade level.	--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.

Standard 7.7: Geometry and Measurement Concepts

Grade Expectations	***LineUp With Math™* Activities**
M5: 15 Measures and uses units of measures appropriately and consistently, and makes conversions within systems when solving problems across the content strands. M(G&M)-5-7	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.
M5: 16 Determines elapsed and accrued time to the nearest minute.	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

Standard 7.8: Functions and Algebra Concepts

Grade Expectations	***LineUp With Math™* Activities**
M5: 20 Demonstrates a conceptual understanding of linear relationships ($y = kx$) **as a constant rate of change** by identifying, describing, or comparing situations that represent constant rates of change.	--Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control. --Identify and resolve distance, rate, time conflicts in air traffic control problems by varying plane speeds or changing plane routes.

Standard 2.5: Mathematical Dimensions,
Standard 7.10: Mathematical Problem Solving and Reasoning - Applications

Grade Expectations	*LineUp With Math*™ Activities
M5: 30 Demonstrate understanding of mathematical problem solving and communication through: • **Approach & Reasoning**—The reasoning, strategies, and skills used to solve the problem; • **Connections**—Demonstration of observations, applications, extensions, and generalizations; • **Solution**—All of the work that was done to solve the problem, including the answer; • **Mathematical Language**—The use of mathematical language in communicating the solution; • **Mathematical Representation**—The use of mathematical representation to communicate the solution; and • **Documentation**—Presentation of the solution.	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios. --Explore and apply a variety of strategies to optimize the solution of air traffic control conflicts. --Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.